CLAIMS

1. Method for motion-vector-aided interpolation of a pixel (Px) of an intermediate image lying between two input images, the method comprising:

selection from the first input image (A1) of a first pixel (P0) to which a first video information value (L0) is assigned, using a first motion vector (vec1), and selection from the second input image (A2) of a second pixel (P1) to which a second video information value (L1) is assigned, using the first motion vector (vec1);

selection from the first input image (A1) of a third pixel (P2) to which a third video information value (L2) is assigned, using a second motion vector (vec2), and selection from the second input image (A2) of a fourth pixel (P3) to which a fourth video information value (L3) is assigned, using the second motion vector (vec2);

determination of an interval specified by the first video information value and the second video information value (L0, L1) or an interval specified by the third video information value and the fourth video information value (L2, L3); and

mixing of the video information values (L0, L1, L2, L3) by multiplying the first video information value (L0) by a first weighting factor (k0), the second video information value (L1) by a second weighting factor (k1), the third video information value (L2) by a third weighting factor (k2), and the fourth video information value (L3) by a fourth weighting factor (k3) and adding the weighted video information values so obtained in order to obtain a video information value (Lx) of the pixel (Px) of the intermediate image, the weighting factors (k0, k1, k2, k3) being chosen such that this video information value (Lx) lies within the interval determined.

2. Method according to claim 1, wherein a first interval given by the first video information value and the second video information value (L0, L1) and a second interval given by the third video information value and the fourth video information value (L2, L3) are determined, the interval whose span of interval bounds is smaller in absolute value being used in the selection of the weighting factors (k0,k1, k2, k3).

3. Method according to claim 2, wherein the first video information value (L0) and the second video information value (L1) are each equally weighted.

4. Method according to claim 3, wherein the third video information value (L2) and the fourth video information value (L3) are each equally weighted.

5. Method according to claim 3, wherein the second motion vector is a zero vector.

6. Method according to claim 1, wherein first a first intermediate value (M01) is generated by mixing the first video information value and the second video information value (L0, L1) and a second intermediate value (M23) is generated by mixing the third video information value and the fourth video information value (L2, L3), and the intermediate signals (M01, M23) are weighted using a weighting factor (k0123) in order to obtain the video information value (Lx) of the pixel (Px) of the intermediate image.

7. Method according to claim 6 wherein the first video information value and the second video information value (L0, L1) are equally weighted in the generation of the first intermediate value (M01) and wherein the third video information value and the fourth video information value (L2, L3) are equally weighted in the generation of the second intermediate value (M23).

8. Method according to claim 7 wherein the first intermediate value (M01) or the second intermediate value (M23) is selected as the interpolated video information value (Lx) depending on the location of one of the two intermediate values (M01; M23) relative to the interval bounds (L0, L1).

9. Method according to claim 8 wherein the intermediate value (M01; M23) is selected that is formed by the video information values (L0, L1; L2, L3) defining the interval if the other intermediate value (M23; M01) lies outside this interval and wherein the other intermediate value (M23; M01) is selected otherwise.

10. Method according to claim 1, wherein a first interpolated video information value is determined using the first interval formed by the first video information value and the second video information value (L0, L1) and a second interpolated video information value is determined using the second interval formed by the third video information value and the fourth video information value, and wherein the interpolated video information value (Lx) of a pixel of the intermediate image is formed by mixing the first interpolated video information value and the second interpolated video information value.

11. Method according to claim 10 wherein first and second interpolated video information values are equally weighted in the formation of the interpolated video information value (Lx).